

# **Appendix S. Greater Sage-grouse and Pygmy Rabbit Conservation Measures Plan**



# **Greater Sage-grouse and Pygmy Rabbit Conservation Measures Plan**



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## List of Abbreviations and Acronyms

DBA	decibels
ESA	Endangered Species Act
Ruby	Ruby Pipeline, LLC
Project	Ruby Pipeline Project
ROW	right-of-way
USFWS	United States Fish and Wildlife Service
WNV	West Nile Virus





# **1.0 Introduction**

This appendix outlines the construction and operation impacts of the Ruby Pipeline Project (Project) to greater sage-grouse, pygmy rabbits, and their habitats and outlines the conservation and mitigation measures that Ruby Pipeline, LLC (Ruby) would implement to minimize such impacts. The mitigation approaches presented in this section are those that would be used to compensate for unavoidable Project-related impacts.

Construction of the Project would require a nominal 115-foot-wide construction right-of-way (ROW) to accommodate pipe stringing and welding, large equipment, the pipeline trench, and temporary storage of topsoil and trench spoil. Numerous minimization measures and conservation actions have been developed and would be employed during Project construction. The relevant state and federal regulatory agencies have been consulted and would be consulted during the construction phase of the Project.



## 2.0 Greater Sage-grouse

Several species of sagebrush and associated grass and forb species are important to sage-grouse for nesting, protection, and forage. Sagebrush leaves are critical forage for sage-grouse during late fall and winter months. Greater sage-grouse leks, nesting areas, and seasonal habitats occur in the Project route in Wyoming, Utah, and Nevada. Sage-grouse habitat within the 115-foot pipeline construction ROW would be disturbed by the removal of vegetation and soil. Habitat disturbances would likely be long-term (greater than five years). Ruby is developing Restoration and Revegetation Plans for each state with input from federal and state agencies to ensure sage-grouse habitat requirements are being met with development of appropriate seed mixes or planting of container-grown sagebrush and other shrub seedlings.

Impacts to sagebrush habitat would result from such activities as trench excavation, equipment operation, staging of the pipe, and vehicular travel. Construction noise – generated from activities such as trench excavation, compressor stations, equipment operation, staging of the pipe, and vehicular travel – can impact sage-grouse lek and nesting behavior if it occurs within the agency designated lek buffers. However, impacts to leks are not expected since Ruby will adhere to agency work windows and buffer areas.

The United States Fish and Wildlife Service (USFWS) recently determined that listing the sage-grouse under Endangered Species Act is warranted, but precluded by higher priority listing activities. Thus, the sage-grouse is now a candidate species. Should this species be listed under the ESA prior to construction, the USFWS would be consulted to determine necessary terms, conditions, and recommended conservation measures.



## 3.0 Pygmy Rabbit

Pygmy rabbit populations and habitat type occur along the Project route. The Project route would impact pygmy rabbit habitat in Lincoln and Uinta counties in Wyoming; Rich County in Utah; and Elko, Humboldt, and Washoe counties in Nevada. Habitat would be disturbed within the 115-foot pipeline construction ROW as vegetation and soil were removed.

Ruby's 2009 field surveys delineated a total of 85 pygmy rabbit burrow complex areas, totaling an area of 67.3 acres. More pygmy rabbit areas were documented in Nevada (47.1 percent) than in Wyoming (28.2 percent) and in Utah (24.7 percent); however, pygmy rabbit areas documented in Utah were larger on average (1.22 acres/site) than in Wyoming (0.50 acres/site) and in Nevada (0.74 acres/site). Grazing was minimal (none, light, or slight) on most delineated pygmy rabbit areas (81.2 percent), with moderately grazed areas comprising 10.6 percent and heavily/severe grazed areas comprising 8.2 percent.

**Wyoming** - Ruby biologists recorded 24 pygmy rabbit areas in Wyoming, totaling 12.0 acres. Nineteen of these areas are currently active, and five were recently active. Three pygmy rabbit individuals also were documented.

**Utah** - Ruby biologists recorded 21 pygmy rabbit areas (25.59 acres) and documented 21 pygmy rabbit individuals in Utah. Nineteen of these areas are currently active, while two were recently active.

**Nevada** – Ruby biologists recorded 40 pygmy rabbit areas (29.63 acres) and documented 11 pygmy rabbit individuals in Nevada. Twenty-five of these areas are currently active, 13 were recently active, and two were historically active.

**Oregon** – In 2008 field surveys, Ruby biologists detected no pygmy rabbits or their sign in Oregon. Suitable habitat was not as common across the Oregon section of the Project route as in the other states. Unsuitable habitats such as forests/woodlands, agriculture fields, and open water comprise approximately 60% of the land cover.

In areas inhabited by pygmy rabbits, impacts likely would result from such activities as grading, clearing, trench excavation, equipment operation, staging of the pipe, and/or vehicular travel. Construction noise likely would impact rabbits and breeding behavior. Noise would be generated from such activities as trench excavation, compressor stations, equipment operation, staging of the pipe, and vehicular travel.



## 4.0 Avoidance and Minimization Measures

Ruby has agreed to undertake the following avoidance and minimization measures to promote the conservation of pygmy rabbit and greater sage-grouse. These measures will be applied in areas identified in the habitat matrices developed as part of the overall review of the project.

### **Measures Applicable to Both Species**

1. Ruby has coordinated with the Bureau of Land Management (BLM) and the USFWS to define areas of high-quality and suitable greater sage-grouse and pygmy rabbit habitat. This process and the results are attached hereto as Attachment A.
2. Whenever determined as practicable by the Federal Energy Regulatory Commission and Bureau of Land Management (BLM) in collaboration with Ruby, Ruby will incorporate into its construction right-of-way existing roads that immediately parallel the working side of the Project route in suitable sage-grouse and pygmy rabbit habitat, so long as the existing roads are not publicly used roads and their use would not interfere with local traffic. The incorporation of an existing road into the working side of the construction right-of-way will reduce the amount of new surface disturbance required for the right-of-way in that area.
3. Ruby will make micro-adjustments to the Project route where practicable to reduce the incursion into suitable greater sage-grouse and pygmy rabbit habitat. For example, the route could be shifted slightly to avoid an important sagebrush feature, such as high density and cover sagebrush stands with deep, loamy soils or active and recently active burrows, that is beneficial to the species without requiring a major adjustment to the route or bend in the pipeline. Where such micro-adjustments would impact another sensitive resource, such as a historic or prehistoric site, Ruby will coordinate with the appropriate agencies on a case-by-case basis to determine whether the micro-adjustment should be implemented.
4. Rather than creating any new roads to access the ROW, Ruby will use existing roads to reach the Project route during construction and operation of the Project in suitable greater sage-grouse and pygmy rabbit habitat. Upgrades to existing roads will be limited to situations where the road would not be otherwise passable by construction equipment. Any upgraded roads will be returned to their original status, to the maximum extent practicable, unless otherwise directed by the landowner or land management agency.
5. Ruby will cut or mow sagebrush in site-specific areas of suitable greater sage-grouse and pygmy rabbit habitat where full ROW grading is not required for construction. To help retain soil integrity, sagebrush will not be bladed in these areas. In addition, the

proper sagebrush taxon will be seeded or transplanted as part of the ROW restoration process. As a note, the Wyoming BLM have indicated that they will require full right-of-way grading for extended areas along the ROW, this is detailed in the POD main text. Ruby will work with BLM to limit such full ROW grading in suitable greater sage-grouse and pygmy rabbit habitat to help facilitate greater use of mowing in those areas. Refer to Appendix E: Wyoming Restoration Plan for further detail.

6. To the maximum extent practicable, Ruby will restore the Project route in suitable greater sage-grouse and pygmy rabbit habitat using native grasses, palatable native forbs, and appropriate sagebrush seed collected from the local vicinity so as to achieve composition, diversity, and cover similar to that of the surrounding vegetation community. Unless otherwise specifically instructed otherwise by the land management agency, Ruby will use native seed across the entire ROW, where such native seed is available.
7. Ruby will create shrub patches during restoration in site-specific areas of high-quality greater sage-grouse and pygmy rabbit habitat by planting appropriate sagebrush subspecies.
8. As described in its Noxious Weed Control Plan (POD, Appendix H), Ruby will implement a comprehensive invasive plants control program along the entire Project route, including suitable sage-grouse and pygmy rabbit habitat, in order to prevent the introduction of noxious and invasive plants in areas disturbed by Project construction and operation.
9. During construction, Ruby will implement typical dust control measures required by the BLM or state agency with jurisdiction to limit release of dust from access roads and other Project areas, as described in Appendix N of the POD.

### **Measures Applicable to Greater Sage-grouse**

1. In 2009, Ruby surveyed for leks, noting activity, within two miles of the Project route and along access roads within sagebrush habitat.
2. Where practicable, regardless of the quality of habitat, Ruby will make micro-adjustments to the Project route in order to locate the pipeline at least 0.6 mile from the perimeter of any occupied/active leks encountered.
3. No permanent surface buildings or pipeline appurtenances (not including signage required by the United States Department of Transportation, main line block valves or cathodic protection test facilities) will be constructed within 0.6 mile from the perimeter of occupied/active lek sites.
4. Except as provided herein, Ruby will avoid construction activities as follows:
  - within three miles of an occupied/active lek within designated core areas from March 15th to July 15th, within two miles of an occupied/active lek outside



- designated core areas between March 15<sup>th</sup> and July 15<sup>th</sup>, or in any identified nesting or brood rearing habitat regardless of distance from a lek from March 15<sup>th</sup> to July 15<sup>th</sup> in the state of Wyoming;
- within four miles of an occupied/active lek in Rich and Cache Counties, Utah between April 1st and May 31st, and within four miles of an occupied/active lek in Box Elder County, Utah between March 15th and May 15th; and
  - within two miles of an occupied/active sage-grouse lek throughout Nevada between March 1st and May 15th.
5. If necessary for Project construction, Ruby will coordinate with the local BLM office, USFWS, and the applicable state wildlife agency to identify acceptable construction activities within agency-designated, temporal and/or spatial buffers to occupied/active leks. Any deviation would require prior written approval of the FERC and the affected land management agency.
  6. Within the buffer to an occupied/active lek and in designated greater sage-grouse winter habitat, Ruby will only replace or restore fences within the ROW; it will not create any new fences. Ruby will add permanent reflectors, markers, or other visibility-enhancing device on the top wire. Unless in conflict with land management agency requirements, fences will have only three strands, with barbless wires for the top and bottom strands. Strand heights will be built to BLM standard fence requirements.
  7. Ruby will remove fences from the ROW that are not needed, as determined and specified by the landowner or land management agency.
  8. To minimize the effects of continuous noise on greater sage-grouse populations, Ruby will reduce noise levels to 49 decibels (dBA) or less within two miles of an occupied/active lek. Permanent, ongoing noise generators, such as compressor stations, will be located far enough away from occupied/active greater sage-grouse leks to ensure that the noise that reaches those habitats is less than 49 dBA, as determined by a noise study performed by a qualified consultant.
  9. West Nile Virus (WNV) is a health risk to greater sage-grouse. Numerous studies have documented that sage-grouse seem to be especially susceptible to WNV, but resistance is expected to increase slowly over time. Mosquitoes are the main vector for WNV. The water ponds found in oil and gas fields increase larval mosquito habitat by 75 percent. WNV occurrence can be reduced by minimizing standing and slow-flowing water during the summer and fall months, when mosquito breeding occurs. Any Project-caused standing or slow-moving water that cannot be eliminated or refreshed within two to three days will be treated with a mosquito larvicide, according to manufacturer directions. Naturally occurring wetlands and riparian areas will not be treated with the larvicide.
  10. Ruby will concentrate its sagebrush restoration efforts on nesting, brooding, and winter range for greater sage-grouse. In selected locations, such as breeding and

nesting areas in close proximity to the Project route, as determined in conjunction with the BLM office, USFWS, and/or state wildlife management agency with jurisdiction, Ruby will replant container-grown sagebrush or seedlings removed from the ROW prior to construction and properly stored and watered during construction. Ruby will water any such plantings during the growing season (June through September) once per month for a period of two years. This watering will be accomplished by a water truck spraying the ROW. Where restoration efforts may be impaired by grazing or by likely climate conditions, Ruby and the agency with jurisdiction may agree to utilize normal seed application in place of this option.

### **Measures Applicable to Pygmy Rabbit**

1. Ruby will conduct pre-construction and post construction surveys for pygmy rabbit presence in suitable habitat, conducted by qualified wildlife biologists using protocols defined by the relevant and appropriate wildlife authority on the lands affected.
2. Ruby will identify areas with densely growing, large-stature sagebrush plants with deep soils, and consider micro-adjustments to the Project route to avoid or minimize effects on this potential pygmy rabbit habitat.
3. Ruby will take all practicable measures to avoid or minimize impacts on suitable pygmy rabbit habitat in the Project route during pipeline construction such as stacking of slash in piles to provide alternate habitat at the perimeter of the ROW.
4. Working with the BLM and UDNR, following specific protocols where circumstances are favorable, Ruby will use qualified biologists to relocate rabbit colonies, using catch and release methods into suitable habitat. Where capture and release has occurred, Ruby will then mow the colony location to prevent repopulation during project activities.

# **Attachment A. Greater Sage-grouse and Pygmy Rabbit Conservation Agreement**

To be included in final draft, as reviewed and approved by BLM biologists, managers, and state directors and state wildlife agencies.